Cracking

Q1. (2018) – 6d (i, iii)

A)

Question Number	Answer	Mark
6(d)(i)	fuel oil	**(1)** AO 3 2a

B)

Question Number	Answer	Additional guidance	Mark
6(d)(iii)	C_6H_{14}		**(1)** AO 2 1

Q2. (2021) – 9b

Question number	Answer	Additional guidance	Mark
9(b)	C_2H_4	Allow H_4C_2	**(1) AO2**

Q3. (2023) – 9b

Question number	Answer	Additional guidance	Mark
9(b)	M_r of CH_2 = 12 + (2x1) = 14 (1) $\frac{56}{14}$ = 4 (1) formula of Y = 4 x CH_2 = C_4H_8 (1) formula of X = (C_6H_{14} + C_4H_8 =) $C_{10}H_{22}$ (1)	allow ecf throughout MP1 must be for CH_2 allow 14 x 4 = 56 allow Y has 4C and 8H C_4H_8 without working scores MP3 only. C_4H_8 = (4 x 12) + (8 x 1) = 56 scores MP1, 2 and 3 for MP4 must be written as formula $C_{10}H_{22}$ without working scores MP4 only ecf can be awarded for MP4 as long as working for alkene to be added is seen ignore formula of X = (C_6H_{14} + CH_2 =) C_7H_{16}	**(4) AO3-1**